

L2010300009

ROCKFORD SAND AND GRAVEL

ILC 000034371

SF/HRS

EPA Region 5 Records Ctr.



393142

# CERCLA Integrated Site Assessment



**Illinois Environmental  
Protection Agency**

2200 Churchill Road  
P. O. Box 19276  
Springfield, IL 62794-9276

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1. INTRODUCTION.....	1-1
2. SITE BACKGROUND.....	2-1
2.1 INTRODUCTION.....	2-1
2.2 SITE DESCRIPTION.....	2-1
2.3 SITE HISTORY.....	2-3
2.4 REGULATORY STATUS .....	2-3
2.5 APPLICABILITY OF OTHER STATUTES.....	2-3
3. SITE INSPECTION ACTIVITIES AND ANALYTICAL RESULTS.....	3-1
3.1 INTRODUCTION.....	3-1
3.2 RECONNAISSANCE INSPECTION.....	3-1
3.3 SITE REPRESENTATIVE INTERVIEW.....	3-5
3.4 SOIL/SEDIMENT SAMPLING.....	3-5
3.5 GROUNDWATER SAMPLING.....	3-9
3.6 SURFACE WATER SAMPLING.....	3-12
3.7 ANALYTICAL RESULTS.....	3-12
3.8 KEY SAMPLES.....	3-14
4. IDENTIFICATION OF SOURCES	
4.1 INTRODUCTION.....	4-1
4.2 CONTAMINATED LANDFILL, SOIL AND FILL.....	4-1
4.3 POTENTIAL UNDETECTED SOURCES.....	4-2
5. MIGRATION PATHWAYS.....	5-1
5.1 INTRODUCTION.....	5-1
5.2 GROUNDWATER PATHWAY.....	5-1
5.3 SURFACE WATER PATHWAY.....	5-3
5.4 AIR PATHWAY.....	5-4
5.5 SOIL EXPOSURE PATHWAY.....	5-5
6. BIBLIOGRAPHY.....	6-1

<u>Appendix</u>	<u>Page</u>
A SITE 4-MILE RADIUS MAP.....	A-1
B SURFACE WATER ROUTE MAP.....	B-1
C U.S. EPA FORM 2070-13.....	C-1
D TARGET COMPOUND LIST.....	D-1
E IEPA SITE PHOTOGRAPHS.....	E-1
F ANALYTICAL RESULTS FROM IEPA COLLECTED SAMPLES (See volume 2 of 2)	F-1

## LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
2-1	STATE OF ILLINOIS LOCATION MAP.....	2-5
2-2	SITE LOCATION MAP.....	2-6
2-3	AERIAL PHOTOGRAPH .....	2-7
3-1	SAMPLING LOCATION MAP .....	3-17
3-2	SAMPLING LOCATION MAP (Background).....	3-18

# LIST OF TABLES

<u>Table</u>		<u>Page</u>
3-1	SOIL/SEDIMENT SAMPLES.....	3-8
3-2	GROUNDWATER SAMPLES.....	3-11
3-2	KEY SAMPLES TABLE (Soil/sediment).....	3-15
3-3	KEY SAMPLES TABLE (Groundwater).....	3-16
F-1	SAMPLE SUMMARY FROM IEPA COLLECTED SAMPLES.....	F-1

## 1. INTRODUCTION

On September 27, 1994 the Illinois Environmental Protection Agency's (IEPA) Site Assessment Unit was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a CERCLA Integrated Site Assessment inspection of the Rockford Sand and Gravel site located in Rockford, Illinois.

The site was initially placed on CERCLIS (Comprehensive Environmental Response, Compensation and Liability Act Information System) in October, 1993 as a result of a request for discovery action initiated by the State of Illinois. This action was taken due to complaints concerning unpermitted dumping of wastes and the possibility that hazardous wastes may have been illegally dumped during the 1950's and 1960's.

The site received its initial CERCLA evaluation in the form of research for an Integrated Assessment by Robert Casper from the Illinois EPA in February, 1994. In September, 1994, the Illinois EPA's Site Assessment Unit prepared and submitted to the Region V offices of the U.S. Environmental Protection Agency an Integrated Site Assessment inspection work plan for the Rockford Sand and Gravel site. The sampling portion of the Integrated Site Assessment inspection was conducted on November 2 and 3, 1994 when the sampling team collected a total of six monitoring well, one residential

well, three sediment and seven soil samples which were analyzed for full organic and inorganic Target Compound List substances. The purpose of the Integrated Assessment has been developed from USEPA directive and guidance information which outlines Site Assessment program strategies. The information states:

The Integrated Assessment will be conducted to: 1) Collect data which would satisfy both site assessment and remedial program activities. This would incorporate hazardous waste, surface water, air and groundwater concerns. 2) The objectives of the assessment are to determine whether time or non time critical removals are warranted and to determine whether the site is National Priorities List (NPL) caliber. If the determination is made that the site is NPL caliber, additional data will likely be needed to complete the assessment. A sampling plan to accommodate removal and site assessment needs, as well as initial remedial needs should be developed. 3) Determination of site sampling needs will be accomplished with an understanding to assure adequate data for the removal assessment and the preparation of the Hazardous Ranking System (HRS) score as well as the need for possible initial sampling for the remedial investigation. Based on the preliminary HRS score and removal program information, the site will then either be designated as No Further Action (NFA) or carried forward as an NPL listing candidate. Sites that are designated NFA or deferred to other statutes are not candidates for an Integrated Assessment. 4) Upon completion of the data gathering, there will be a determination of whether the site should be forwarded within the Superfund process, either through the remedial or removal programs.

The initial assessment of a site as it enters the Superfund program within Region V will be conducted by either a Regional On-Scene Coordinator (OSC) and a Site Assessment Manager (SAM) or by State personnel. An OSC and a SAM will be assigned for all new sites entering the Regional Superfund Program. If an emergency is found to occur, USEPA or state emergency removal staff will be immediately contacted for action. If the site needs further Superfund activities, a Site Assessment Team (SAT), comprised of the State, the SAM, the Regional Project Manager (RPM) and an OSC will

be formed. As necessary, additional data can be generated for the SAT to make a recommendation to the Regional Decision Team (RDT) for further possible action.

The Integrated Assessment will address all the data requirements of the revised HRS using field screening and NPL level Data Quality Objectives (DQO's) prior to data collection. It will also provide needed data in a format to support remedial investigation workplan development. Only sites that appear to score high enough for NPL listing and that have not been deferred to another authority will receive an Integrated Assessment.

The Region V offices of the U.S. EPA have also requested that the Illinois Environmental Protection Agency identify sites during the Integrated Site Assessment inspection that may require removal action to remediate an immediate human health and/or environmental threat. A U.S. EPA Removal Integrated Site Evaluation (RISE) form pertaining to site specific operations and waste characteristics was completed and forwarded to U.S. EPA Regional offices. During the field investigation portion of the Integrated Assessment a number of environmental samples were collected from the facility and at points of potential pollutant migration. An analysis of these samples showed that established CERCLA Removal Action Levels (RALs) were not exceeded in any sample collected during the Integrated Assessment sampling event. Therefore, a USEPA Region 5 On-Scene Coordinator (OSC) was not assigned to the Rockford Sand and Gravel site.

During the Integrated Assessment a number of other Removal Action Criteria were also evaluated. These criteria included the presence of: contaminated drinking water

<sup>supplies</sup>  
supplies, hazardous substances stored in containers that may pose a threat of release, high level contamination at or near the surface in soils that may migrate, and a threat of fire or explosion.

Based on the information gathered over the course of the formal Integrated Assessment, the author has concluded that the Rockford Sand and Gravel site does not pose enough of a threat to human health and/or the environment to warrant a time or non-time critical CERCLA removal action.

It should be stressed that the CERCLA removal status can be re-evaluated at such time that additional information suggests that the facility may be posing a threat to human health or the environment.

## 2. SITE BACKGROUND

### 2.1 INTRODUCTION

This section includes information obtained over the course of the formal CERCLA Integrated Site Assessment inspection investigation and previous Illinois Environmental Protection Agency activities involving this site.

### 2.2 SITE DESCRIPTION

Rockford Sand and Gravel (Number 1) is an inactive gravel pit located on Simpson Road at the southwest side of Rockford (population 142,556), Winnebago County, Illinois. The site consists of approximately 45.3 acres and presently has one active business, Laidlaw, on the property. Laidlaw is a waste hauling company employing approximately 35 people that uses the property as a truck storage and repair facility. The firm does not store wastes on their property.

Aerial photographs obtained from the Illinois Department of Transportation (dated 3-23-72 and 9-26-79) indicate that activities at the Rockford Sand and Gravel No. 1 site covered the area enclosed by South Main Street (Route 2) on the west, to Indian Hills Subdivision on the north, to the Rock River on the east side and Simpson Road on the south. Sanborn Fire Insurance maps reviewed at the Illinois State Library did not indicate that the property was used for manufacturing or other commercial purposes. The property is currently owned by

several parties. The Sanitary District of Rockford owns a strip of land along the Rock River of approximately 11.8 acres, Winnebago Reclamation Service owns approximately 30.3 acres which extends from the sanitary district property west to the portion of the property owned by the Miller South Main Partnership. The partnership owns approximately 3.2 acres adjacent to South Main Street and Laidlaw is situated on a portion of their property.

The property is legally described as being located in the Southeast Quarter of the Southwest Quarter, and the Southwest Quarter of the Southeast Quarter, of Section Three, Township Forty-Three North, Range One East of the Third Principal Meridian in Winnebago County, Illinois. The site is surrounded by South Main Street (Route 2) on the west, with businesses and private residences beyond; by Indian Hills Subdivision on the north, residences of whom use groundwater for drinking; by the Rock River on the east; and on the south by Simpson Road with the closed Rockford Sand and Gravel number 2 pit lying beyond. Access to the site is via Simpson Road and the property is fenced on the west and north sides. Trespassers have been reported to use the pond located at Rockford Sand and Gravel No. 2 for fishing and swimming. A four mile radius map of the Rockford Sand and Gravel site and a fifteen mile surface water map is provided in Appendix A and B of this report.

### 2.3 SITE HISTORY

According Illinois Environmental Protection Agency files and interviews with Rockford Sand and Gravel personnel Robert Anderson began sand and gravel mining operations in the late 1940's or early 1950's and ceased mining in the late 1960's. At this time the property was purchased by Rockford Blacktop Company. Rockford Blacktop Company continued mining sand and gravel until the site was permitted in 1973 to receive non-hazardous wastes such as demolition debris and has been permitted to receive phosphate waste water from National Lock Company. The Illinois Environmental Protection Agency has received complaints from local citizens that the property has received unauthorized industrial wastes.

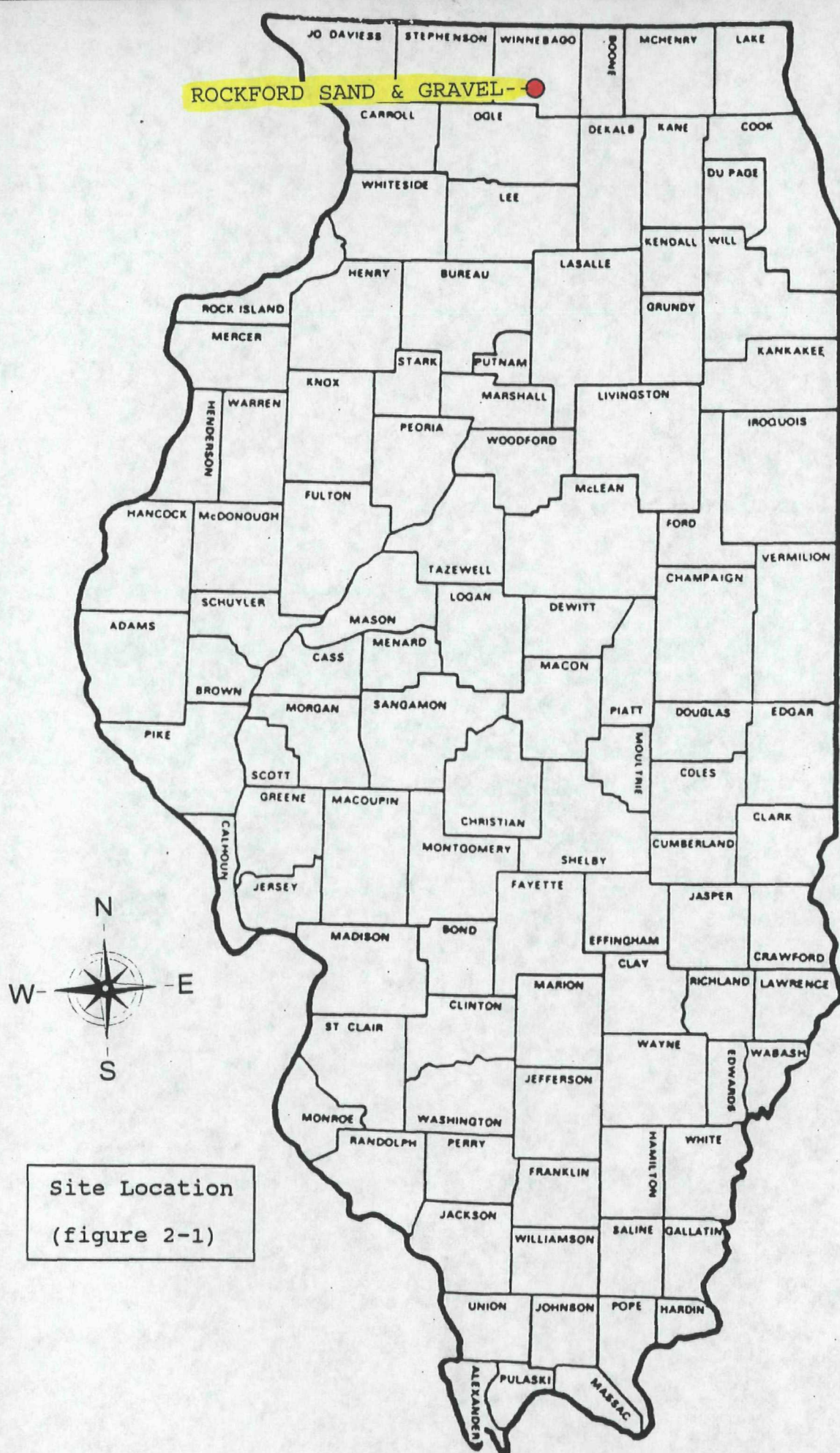
### 2.4 REGULATORY STATUS

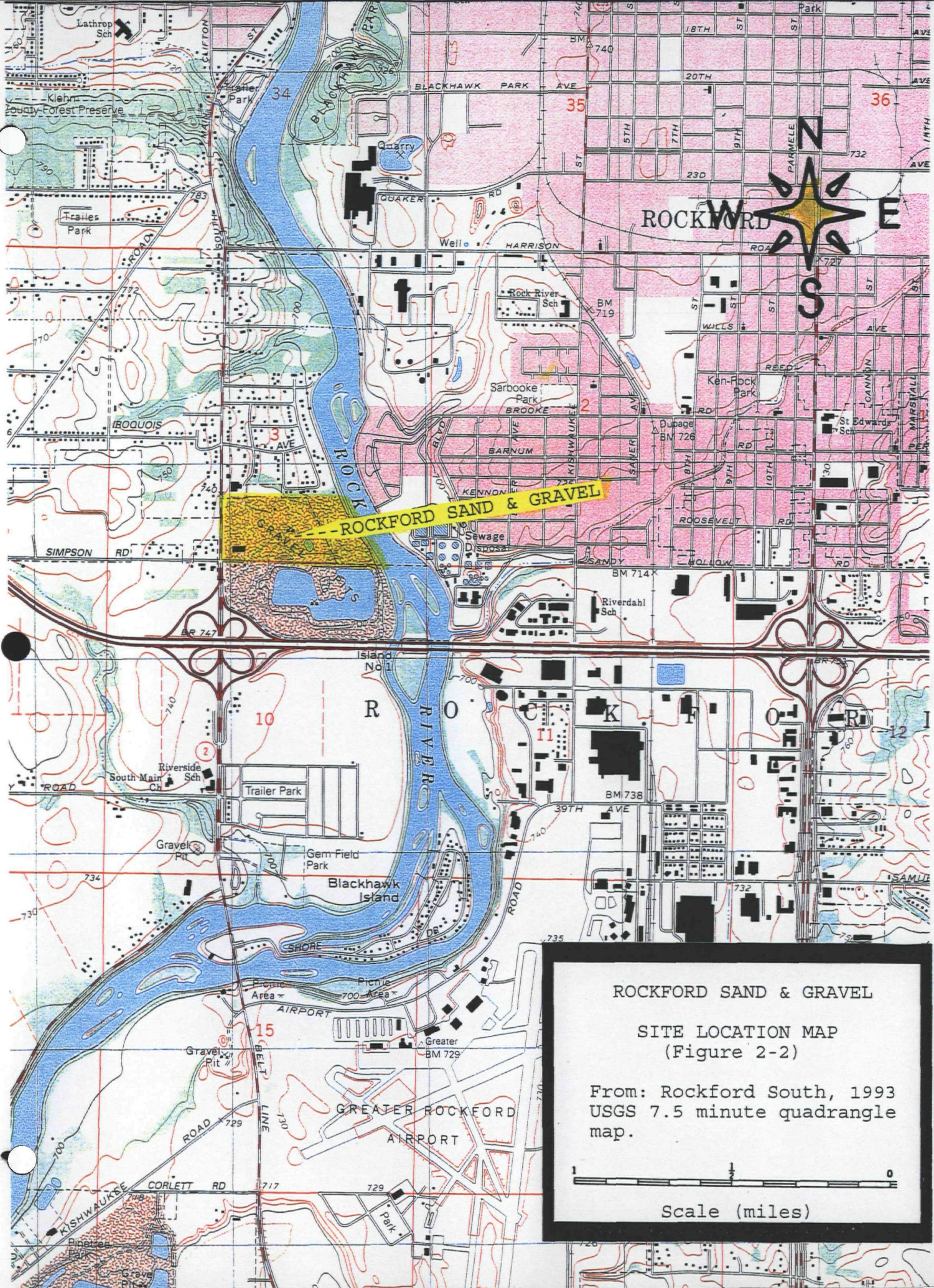
The facility during its years of operation was not subject to the Resource Conservation and Recovery Act (RCRA), Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Atomic Energy Act (AEA), or Uranium Mill Tailings Radiation Control Act (UMTRCA).

### 2.5 APPLICABILITY OF OTHER STATUTES

The Rockford Sand and Gravel Company began operations approximately 45 years ago and has been used to dispose of various permitted wastes from 1973 until 1992. Illinois

Environmental Protection Agency files indicate that a number of permits have been issued to the landfill location under the names of Rockford Blacktop Construction Company and Rockford Sand and Gravel. After the mining of sand and gravel was discontinued in the late 1960's the property was issued a number of permits to dispose of a variety of non-hazardous materials. In April, 1973 permit 1973-23 was issued to Rockford Blacktop Construction Company to use the sand and gravel pit as a landfill to accept in the western pit roofing, cement blocks, broken concrete, dirt and other relatively inert materials. The eastern pit was permitted to receive brush, limbs, trees, leaves, lumber, demolition wastes, tires and white goods. In 1974 permit 74-60 was issued allowing the disposal of 4,000 gallons of phosphate wash water from National Lock Company. In 1981 permit 1981-22- DE was issued to C. J. Howard to develop a landfill to accept only broken asphalt and portland cement, uncontaminated soils and aggregate, with a top soil cover of unspecified thickness required after final contour was reached. In 1989 permit 1989-20-DE/OP was issued for the composting of landscape wastes.





## ROCKFORD SAND & GRAVEL

### SITE LOCATION MAP (Figure 2-2)

From: Rockford South, 1993  
USGS 7.5 minute quadrangle  
map.



Scale (miles)

ROCKFORD SAND & GRAVEL

AERIAL PHOTOGRAPH  
(Figure 2-3)

Scale: 1 inch equals 200 feet

From: Illinois Department of Transportation  
aerial photo taken on April 16, 1988.

SO. MAIN (RT. 2)

PRIVATE RESIDENCES

ROCK RIVER

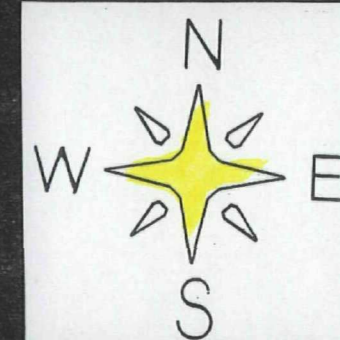
ROCKFORD SAND & GRAVEL

ROCKFORD SANITARY DISTRICT PROPERTY

LAIDLAW

SIMPSON ROAD

ROCKFORD SAND & GRAVEL NO. 2



### 3.0 SITE INSPECTION ACTIVITIES AND ANALYTICAL RESULTS

#### 3.1 INTRODUCTION

This section outlines procedures utilized and observations made during the CERCLA Integrated Assessment site inspection conducted at the Rockford Sand and Gravel facility. Specific portions of this section contain information pertaining to the site representative interview, reconnaissance inspection and field sampling procedures. Also included in this section is information about the soil and groundwater samples that were collected during the site inspection, a description of the analytical results and a table indicating the Key Samples. The Integrated Assessment site inspection for the Rockford Sand and Gravel facility was conducted in accordance with the site inspection work plan that was developed and submitted to the U.S. EPA Region V offices prior to the initiation of field activities. The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for Rockford Sand and Gravel is located in Appendix C of this report.

#### 3.2 RECONNAISSANCE INSPECTION

On September 21, 1994 Mr. Robert Casper and Mr. Dan Wells of the Illinois Environmental Protection Agency conducted a Site Reconnaissance Inspection of the Rockford Sand and Gravel facility in Rockford, Illinois. The reconnaissance included a visual inspection of the facility to delineate the extent of their activities, identify

potential sampling locations and identify appropriate health and safety concerns. During the reconnaissance visit it was determined that Level D personal protection attire could be worn during the sampling activities unless air monitoring equipment detected any concentrations over background levels. After the site reconnaissance visit the route to the nearest hospital was driven as required by IEPA Site Safety Plan standard operating procedures. Prior to the reconnaissance inspection arrangements were made to meet John Lichty at the Rockford facility. Mr. Lichty is the Manager of Winnebago Reclamation Service, which is affiliated with the company that operated Rockford Sand and Gravel. On the date of the visit John Lichty and Tom Hilbert, Environmental Engineer with Winnebago Reclamation Service, conducted a tour of the property. The site has one active business, Laidlaw waste disposal company, on property that was part of the original Rockford Sand and Gravel company property. Laidlaw employs approximately 35 people and the facility consists of approximately 3.7 acres with a building of approximately 17,000 square feet. The Laidlaw facility is surrounded by a high chain link fence and is used as a truck depot and repair center with no wastes known to be disposed of or stored on their property. The Rockford Sand and Gravel property consists of approximately 45.3 acres and is bordered by a residential subdivision (Indian Hills) on the north whose residences use private wells to obtain groundwater. On the

east side a strip of land approximately 400 feet wide presently owned by the Rockford Sanitary District borders the Rock River. This strip of land was at one time a part of the sand and gravel operation prior to being purchased by the sanitary district in 1958. The closed Rockford Sand and Gravel Pit Number 2 lies on the south and South Main Street (Route 2) on the west side. Across South Main Street are private residences who use groundwater for drinking but water mains from Rockford have been extended to this area. The Rockford Sand and Gravel site is surrounded by fencing on the west and north sides and the Rock River forms a natural barrier on the east side. Access from the south is hindered by Route 20, which lies on the south side of Rockford Sand and Gravel Number 2. The gravel pit on the south is being filled in with construction debris but sometimes unauthorized people reportedly use the pit for fishing. The property has six onsite monitoring wells situated along the west, north and east sides that are sampled on a quarterly basis. The analysis performed is only for a limited number of substances and not for the Target Compound List. After the reconnaissance a visit to the Rockford Water Department resulted in the water operator obtaining permission via telephone from a resident of the subdivision directly north of the site to sample their private well. The site has no apparent drainage pathway offsite or into the Rock River. The cover material has not been graded level in many locations and the property presently owned by the sanitary

district has a rugged terrain with piles that would prevent runoff flowing east into the river. However, it is possible that the property discharges into the river via groundwater. A map of Groundwater flow drawn by GeoTrans, Inc. from monitoring well water elevations collected quarterly in 1994 indicate that groundwater flow at the site is towards the east and the Rock River. The Rock River adjacent to the property has islands located at the southeast corner of the site that are classified as Palustrine Broad-leaved Forested Seasonally Flooded wetlands, and the sand and gravel pond located at ✓Rockford Sand and Gravel No. 2 is classified as a Lacustrine Limnetic wetland with an unconsolidated bottom permanently flooded, according to the national wetland inventory map for the Rockford South quadrangle. The property is well vegetated with grasses growing in the central area and scrub trees along the north and east perimeter. No readily identifiable drainage pathway could be found beyond this point and there is no apparent Probable Point of Entry into perennial surface water.

Land use around the facility is residential to the north, residential and commercial on the west, the Rock River on the east, and a closed sand and gravel pit on the south with Route 20 lying beyond. The nearest school is Riverside School located approximately 3,600 feet south of the property.

### 3.3 SITE REPRESENTATIVE INTERVIEW

A site representative interview was held on November 2, 1994 with Tom Hilbert, Environmental Engineer, representing Winnebago Reclamation Service; and Tom Dushek and Bill Bachus, Field Technicians with Montgomery Watson of Madison Wisconsin acting as consultants for Winnebago Reclamation Service; and the author representing the Illinois Environmental Protection Agency. It was explained that the Illinois EPA is primarily interested in sampling the landfill, monitoring wells and wetlands along the Rock River. The consultants wished to split only the onsite water samples and during sampling also filled the required bottles for their required quarterly sampling which coincidentally fell on the sampling date. The consultants opened the wells prior to sampling and on November 2, 1994 the Illinois Environmental Protection Agency sampling team of Robert Casper, Peter Sorensen, Kim Hubbert and Mark Wagner began the site inspection activities.

### 3.4 SOIL/SEDIMENT SAMPLING

On November 2 and 3, 1994 Illinois Environmental Protection Agency Personnel collected six onsite soil, six onsite monitoring wells and two sediment samples along the Rock River. These samples were collected for the purpose of determining if areas of contamination were present at the Rockford Sand and Gravel property and surrounding area (see

figure 3-1 for sampling locations). The shallow soil samples were collected with stainless steel spoons and trowels whereas the deeper soil samples were collected with stainless steel bucket augers. The soil was transferred directly into the sample jars from the sampling device. Before the spoons, trowels or bucket augers were used at the site, each had been decontaminated at the Illinois Environmental Protection Agency's warehouse. HNU photoionization detector readings were taken during sample collection and only one sample, X102, had a reading over background. This sample was 9 ppm (parts per million) over background. During the Integrated Assessment Inspection Level D personal protection was worn.

The soil sample jars and the groundwater bottles were packaged and sealed in accordance with previously documented CERCLA Site Assessment procedures. The IEPA samples were analyzed for the Target Compound List with the organic compounds being analyzed by Southwest Labs of Oklahoma in Broken Arrow, Oklahoma and the inorganic substances by American Analytical and Technical Service, Inc. of Baton Rouge, Louisiana. The residential drinking water sample from the private residence located approximately 500 feet north was analyzed by the United States Environmental Protection Agency Central Region Laboratory in Chicago, Illinois. Photographs for the Rockford Sand and Gravel Integrated Assessment site inspection are provided in Appendix E of this report. According to "Soil Survey Report No. 107" for

Winnebago County, issued in 1980 by the University of Illinois Agricultural Experiment Station, the land where Rockford Sand and Gravel is situated is classified as consisting of "Pits, gravel" which is composed mainly of sandy or gravelly substratum. The surface layer and subsoil have been removed or mixed during excavation. The portion of the property adjacent to South Main Street is classified as "Urban land-Wea complex, 0 to 3 percent slopes". The background sample location at Blackhawk Park is classified as "Urban land-comfrey complex". The following table lists the soil samples that were collected on November 2 and 3, 1994:

TABLE 3-1  
Soil/Sediment Samples

<u>Sample Date Time</u>	<u>Depth</u>	<u>Location</u>	<u>Appearance</u>
X101 15:45 11/3/94	2" to 4"	Background sample collected at Blackhawk park, located approximately 1.4 miles north of the Rockford Sand and Gravel property.	Black organic loam.
X102 12:50 11/3/94	3" to 6"	Collected 143 feet north and 11 feet west of the northeast corner of the Laidlaw facility fence.	Black, cinders and dark soil.
X103 12:20 11/3/94	6" to 12"	Collected 105 feet west and 94 feet south of monitoring well G104.	Black loam with garbage.
X104 11:30 11/3/94	12" to 24"	Collected approximately 656 feet east of the west side of the Laidlaw fence and approximately 440 feet north of Simpson Road.	Black silty sand.
X105 X106 10:30 11/3/94	2" to 6"	Collected 84 feet west of monitoring well G101 and 60 feet south of the fence along the north edge of the property. Duplicate sample X106 also collected at this location.	Brown sandy silt.
X107 10:10 11/3/94	8" to 12"	Collected approximately 87 feet south of monitoring well G106/G107, along the west end of thicket.	Brown sandy clay to 8"; brown sand, some clay to 12".
X108 9:10 11/3/94	8" to 12"	Collected approximately 173 feet south of monitoring well G105, along the west end of thicket.	Brown/black sandy clay.
X201 15:30 11/3/94	1" to 4"	Collected along the Rock River at Blackhawk Park, approximately 1.4 miles north of the Rockford Sand and Gravel property, 202 feet south of the boat ramp.	Black sandy clay.
X202 X203 8:40 11/3/94	0" to 4"	Sample X202 and duplicate X203 collected along the Rock River approximately 212 feet north of Simpson Road.	Black/brown sandy silt.
X204 7:50 11/3/94	0" to 3"	Collected along the Rock River approximately 79 feet north of the southwest corner of the north island located east of Rockford Sand and Gravel Number 2.	Black/brown silty sand.

Standard Illinois Environmental Protection Agency decontamination procedures were followed prior to the collection of all samples. The procedures included the scrubbing of all equipment (bailers, spoons, pans, etc.) with a non-foaming Trisodium Phosphate solution, rinsing with acetone, rinsing with hot tap water again and final rinsed with distilled water. All equipment is air dried, then wrapped and stored in heavy duty aluminum foil for transport to the field. Field decontamination procedures include all of the above except the hot tap water rinse but no field decontamination was necessary during the inspection.

### 3.5 GROUNDWATER SAMPLING

Rockford Sand and Gravel has six onsite monitoring wells installed in 1973. The nearest private well known to exist in the vicinity of the property is located approximately 300 feet north in a subdivision. The nearest municipal drinking water well is Rockford Well No. 34 located approximately 500 feet west of the site. Background sample G201 and duplicate G202 were obtained from a private residence located approximately 500 feet north of the property from a 75 foot deep well. The water was sampled after the lines were purged and taken from a tap that by-passes the water conditioning system, which was shut off several hours prior to sampling. The water in this well was not filtered for total metals since it is used for drinking. Temperature, pH and

conductivity measurements were taken prior to collecting the sample and the water was clear with no noticeable odor. HNU readings were taken of the monitoring wells headspace but no readings over background were noted. All monitoring wells were filtered for total metals using a 5 micron in-line filter. The following table lists the groundwater samples collected on November 2 and 3, 1994:

TABLE 3-2  
Groundwater Samples

<u>Sample Date Time</u>	<u>Depth</u>	<u>Location</u>	<u>Appearance</u>
G201 G202 13:40 11/3/94	75 feet	Background sample G201 and duplicate G202 was obtained from a residential well located approximately 400 feet north of the Rockford Sand and Gravel property. Sample was not split with consultants.	Clear, no odor.
G101 12:50 11/2/94	49.9 feet	Monitoring well located near the northeast corner of the property. Sample split with consultants.	Cloudy, no odor.
G102 17:00 11/2/94	36.8 feet	Monitoring well located near the southeast corner of the property. Sample split.	Cloudy, no odor.
G103 9:50 11/2/94	64.9 feet	Monitoring well located near the northwest corner of the property, approximately 250 feet north of Laidlaw and 150 feet east of South Main Street. Sample split.	Cloudy, no odor.
G104 11:15 11/2/94	34.5 feet	Monitoring well located near the north edge of the property approximately halfway between the west and east borders of the property. Sample split.	Cloudy, no odor.
G105 15:50 11/2/94	26.9 feet	Monitoring well located approximately 350 feet north of the southeast corner of the property. Sample split.	Cloudy, no odor.
G106 G107 14:40 11/2/94	25.6 feet	Monitoring well located near the eastern edge of the property, approximately halfway between the north and south borders of the property. Duplicate sample G107 was also obtained at this location. Sample split.	Cloudy, no odor.

Standard Illinois Environmental Protection Agency decontamination procedures were followed prior to the collection of all samples. The procedures included the scrubbing of all equipment (bailers, spoons, pans, etc.) with a non-foaming Trisodium Phosphate solution, rinsing with acetone, rinsing with hot tap water again and final rinsed with distilled water. All equipment is air dried, then wrapped and stored in heavy duty aluminum foil for transport to the field. Field decontamination procedures include all of the above except the hot tap water rinse but field decontamination was not necessary during the inspection.

### 3.6 SURFACE WATER SAMPLING

No surface water samples were collected during the November 2 and 3, 1994 Integrated Assessment site inspection of the Rockford Sand and Gravel property. The site terrain is irregular and during a storm event drainage would have a tendency to collect onsite. According to the Flood Insurance Rate Map for the Winnebago County, Illinois, November 19, 1980, the facility lies inside the 100 year floodplain. However, this map was compiled prior to the gravel pit being filled to the elevation of the surrounding land so the property now is possibly outside the 500 year floodplain.

### 3.7 ANALYTICAL RESULTS

This section includes a summary of the analytical results of samples collected during the Integrated Site

Assessment inspection conducted at the Rockford Sand and Gravel Company site in Rockford, Illinois. The field activities portion of the CERCLA Integrated Site Assessment inspection included the collection of six onsite and one offsite soil, six onsite monitoring wells and one offsite residential well for background, and two sediment samples along the Rock River adjacent to the site and one background collected north of the site. The samples were collected for the purpose of determining if areas of contamination were present at the Rockford Sand and Gravel property and surrounding area. The seventeen samples were collected to determine if any U.S. EPA Target Compound List compounds were present at the site or at potential receptors of concern. A quality assurance review of the sample analysis was performed by Lockheed Corporation, who is an Environmental Science Assistance Team Contractor for USEPA Region V. A final quality assurance review of the data packages was subsequently performed by the staff of Central Region Laboratories of USEPA Region V. The Target Compound Listing is provided in Appendix D of this report. Specific compound detection limits can be found in Appendix F (the analytical section) of this report. See figure 3-1 for specific sampling locations.

Chemical analysis of the groundwater samples collected by the site inspection personnel revealed elevated concentrations of volatile, semivolatile, inorganic and

tentatively identified substances. Analysis of the seven soil samples collected during the inspection revealed elevated concentrations of volatiles, semivolatiles, pesticides, tentatively identified compounds and inorganic substances. Analysis of the two sediment samples collected revealed elevated concentrations of semivolatile, pesticides, tentatively identified compounds and inorganic substances. None of the samples collected exceeded Removal Action Levels or health based standards and the sediment samples did not exceed the Ontario Sediment Guidelines. See Table F-1 for the summary of the sample results. Complete laboratory analytical data for the samples are provided in Appendix F of this report.

### 3.8 KEY SAMPLES

Samples collected during the Integrated Site Assessment Inspection of the Rockford Sand and Gravel site indicate concentrations of contaminants at levels that are significantly above background at certain sampling points. These concentrations, however, did not exceed established RAL's or health based standards. The following tables list the key samples obtained during the Rockford Sand and Gravel Integrated Site Assessment inspection. For a more detailed sample analysis, refer to Table F-1 Sample Summary, located at the front of Volume 2 of this report.

SITE NAME: ROCKFORD SAND & GRAVEL  
ILO NUMBER: 000034371

TABLE 3-4  
Key Samples  
(Groundwater)

[illegible]

TABLE 3-3  
Key Samples  
(Soil/sediment)

SAMPLING POINT	X101	X102	X103	X104	X105	X106	X107	X108	X201	X202	X203	X204
PARAMETER	11-3-94 (Background)	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94 (Background)	11-3-94	11-3-94	11-3-94
VOLATILES												
Acetone	12.00 U	--	39.00 B	--	--	--	--	--	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg		ug/Kg
SEMIVOLATILES												
Phenanthrene	260.00 J	1000.00	--	--	--	--	--	1300.00	--	--	--	--
Anthracene	50.00 J	230.00 J	--	--	--	--	--	260.00 J	150.00	--	--	--
Fluoranthene	380.00 J	1800.00	1200.00	--	--	--	--	2500.00	--	--	--	--
Pyrene	420.00	2100.00	--	--	--	--	--	2400.00	--	--	--	--
Benzo(a)anthracene	240.00 J	950.00	--	--	--	--	--	1500.00	--	--	--	--
Chrysene	230.00 J	770.00	--	--	--	--	--	1200.00	--	--	--	--
Benzo(b)fluoranthene	200.00 J	--	--	--	--	--	--	1800.00	--	--	--	--
Benzo(k)fluoranthene	200.00 J	1500.00	1100.00	820.00	980.00	770.00	630.00	--	420.00 U	860.00	--	--
Benzo(a)pyrene	180.00 J	560.00	--	--	--	--	--	900.00	610.00	--	--	--
Indeno(1,2,3-cd)pyrene	120.00 J	--	--	--	370.00 J	--	--	1000.00	--	--	--	--
Benzo(g,h,i)perylene	140.00 J	--	420.00	--	--	--	--	980.00 B	380.00	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
TENTATIVELY IDENTIFIED COMPOUNDS												
gamma--Sitosterol	--	--	--	--	--	--	--	--	--	2100.00 NJ	2600.00 NJ	--
Sulfur, mol. (S8)	--	14000.00 NJ	1200.00 NJ	3000.00 J	--	--	--	--	--	4000.00 NJ	4000.00 NJ	7400.00 NJ
Maneb	--	6600.00 NJ	--	--	--	--	230.00 NJ	--	--	--	--	--
Phytol	--	--	--	--	--	160.00 NJ	--	--	--	--	410.00 NJ	--
Stigmast-4-en-3-one	--	--	--	--	--	460.00 NJ	--	--	--	--	1300.00 NJ	--
Naphthalene, 1-methyl-	--	--	--	--	--	--	78.00 NJ	--	--	--	--	--
Benzo(b)napththo[2,1-d]thioph.	--	--	--	--	--	--	--	310.00 NJ	--	--	--	--
7H-Benz[de]anthracen-7-one	--	--	--	--	--	--	--	240.00 NJ	--	--	--	--
2-Pentanone, 4-hydroxy-4-met	--	--	--	--	--	--	--	--	14000.00 NJA	--	--	--
Benzo(e)pyrene	--	--	--	--	--	--	--	950.00 NJ	920.00 NJ	--	550.00 NJ	300.00 NJ
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg		ug/Kg
PESTICIDES												
Endosulfen I	2.00 U	--	2.10 P	6.90	--	--	--	--	--	--	--	--
Dieldrin	3.90 U	--	--	--	--	--	--	5.20 P	--	--	--	--
4,4'-DDE	3.90 U	--	7.40 DJ	--	--	--	--	--	--	--	--	--
Endrin	3.90 U	--	6.20 JPD	--	--	--	--	--	4.40 U	--	6.50 JPD	11.00 JPD
Endosulfan sulfate	3.90 U	--	21.00 DJ	11.00 JPD	--	--	--	15.00 JPD	11.00 JPD	--	19.00 JPD	35.00 JPD
Endrin aldehyde	6.90 P	23.00 P	--	--	80.00 PD	--	--	--	--	--	--	--
4,4'-DDT	3.90 U	--	7.60 P	--	--	--	--	--	4.40 U	4.60 P	--	--
Endrin Ketone	3.90 U	--	5.30 P	--	--	--	--	--	--	--	--	--
alpha-Chlorodane	2.00 U	--	3.00	6.00	--	--	--	--	--	--	--	--
gamma-Chlorodane	2.00 U	--	2.10 P	6.80 P	--	--	--	--	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg		ug/Kg
INORGANICS												
Arsenic	2.50	--	--	--	--	--	--	6.90	--	--	--	--
Cadmium	1.20	--	--	--	--	--	--	--	1.60	--	7.90	--
Calcium	11100.00	65200.00	--	58100.00	57700.00	--	--	--	--	--	--	--
Lead	24.80	141.00	--	--	--	--	--	--	--	--	--	--
Magnesium	6370.00	43000.00	--	32300.00	33900.00	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	0.98 U	--	--	2.30
Silver	--	--	--	--	--	--	--	--	0.53 U	--	0.74 B	--
Sodium	49.80 B	--	--	228.00 B	--	--	--	--	--	--	--	--
Cyanide	0.60 U	--	--	--	--	--	0.70	--	0.66 U	1.70	--	--
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		mg/Kg

ROCKFORD SAND & GRAVEL  
SAMPLE LOCATION MAP

Scale: 1 inch equals 200 feet.

From: Illinois Department of Transportation  
aerial photo taken on April 16, 1968.

(Figure 3-1)

ROCK RIVER

-G103

X102--

G104--

X103--

--X104

G101--

--X105/X106

G106/G107--

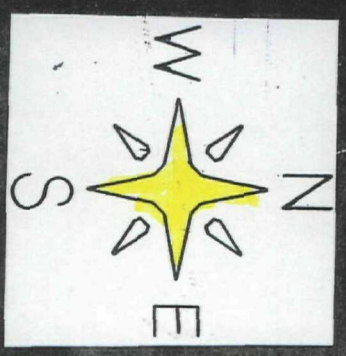
X107--

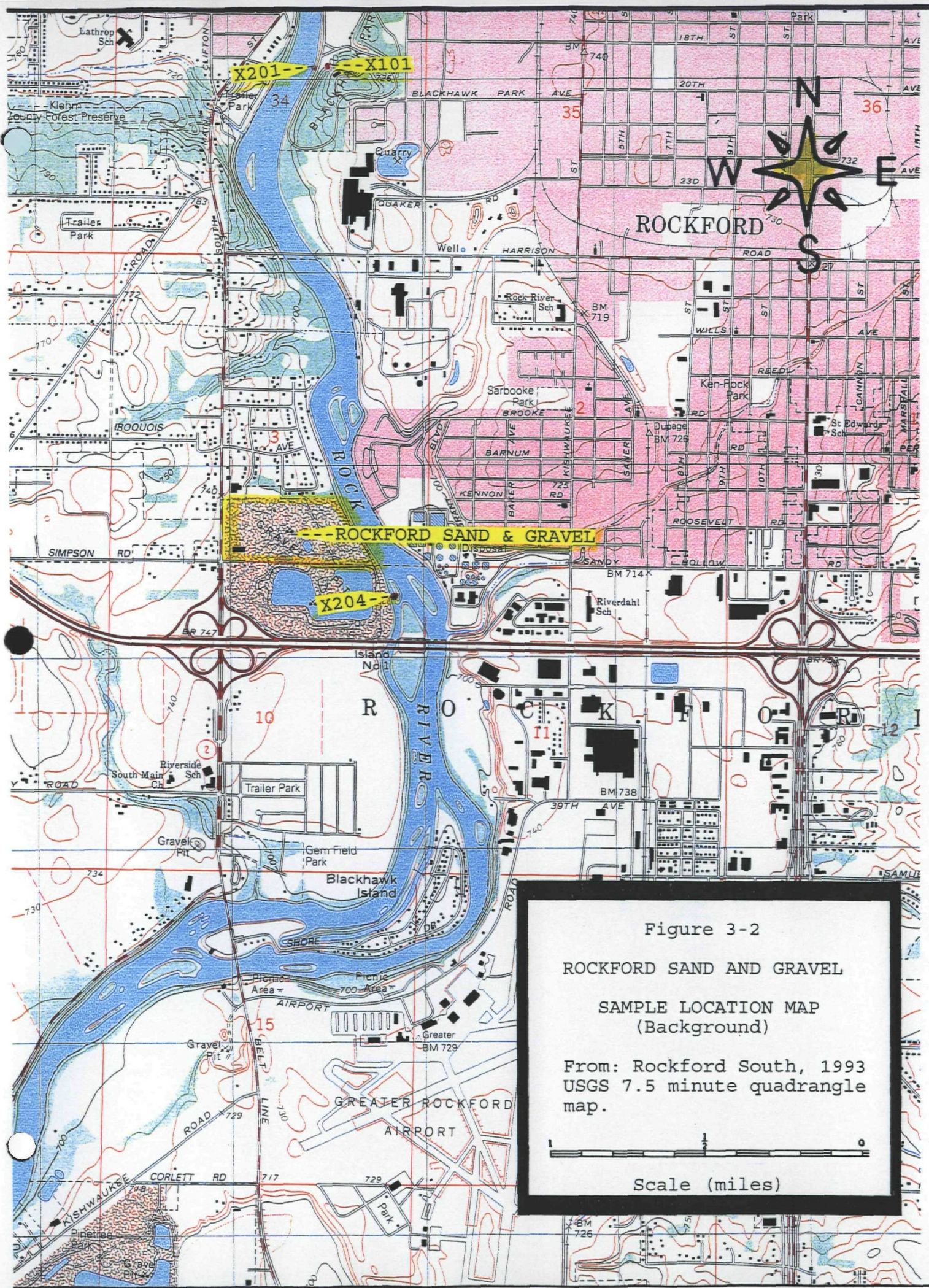
G105--

X108--

G102--

--X202/X203







## **TARGET COMPOUND LIST**

### **Volatile Target Compounds**

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

### **Base/Neutral Target Compounds**

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene

2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

#### Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

### Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

### Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobalt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

## DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICS) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and <u>all</u> concentration values are flagged with the "D" flag.	Not used.
E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference.
A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
M	Not used.	Duplicate injection (a QC parameter not met).

N	Not used	Spiked sample (a QC parameter not met).
S	Not used.	The reported value was determined by the Method of Standard Additions (MSA).
W	Not used.	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
*	Not used.	Duplicate analysis (a QC parameter not within control limits).
+	Not used.	Correlation coefficient for MSA (a QC parameter) is less than 0.995.
P	Not used.	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
CV	Not used.	Method qualifier indicates analysis by Cold Vapor AA.
AV	Not used.	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not used.	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
T	Not used.	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

#### 4.1 INTRODUCTION

In this section the author will briefly discuss the various hazardous waste sources which have been identified in the initial stages of the CERCLA Integrated Site Assessment inspection. Information concerning the size, volume and waste composition of each source has been derived throughout the initial site assessment, reconnaissance visits, and the screening site sampling action. It should be pointed out, however, that the total number and nature of each of the sources identified below may be subject to change. The site may be redefined as it progresses through the CERCLA site investigation program and receives further investigation.

#### 4.2 CONTAMINATED LANDFILL, SOIL AND FILL

Soil samples collected during the Integrated Site Assessment inspection indicate that there are areas of contaminated soil and fill on Rockford Sand and Gravel property. The samples were collected at depths ranging from zero to twenty-four inches but the depth to which the contamination reaches is unknown. Using a planimeter and an aerial photograph obtained from the Illinois Department of Transportation the area within the contaminated sampling points was measured and estimated to be approximately 575,000 square feet (13.2 acres). The volatile contaminant found is Acetone (39 ppb). Semivolatile substances include Phenanthrene (1300 ppb), Anthracene (260 J ppb), Fluoranthene

(2500 ppb), Pyrene (2400 ppb), Benzo(a)anthracene (1500 ppb), Chrysene (1200 ppb), Benzo (b)fluoranthene (1800 ppb), Benzo(k)fluoranthene (1500 ppb), Benzo(a)pyrene (900 ppb), Indeno(1,2,3-cd)pyrene (1000 ppb) and Benzo(g,h,i)perylene (980 B ppb). Tentatively Identified compounds include sulfur, mol.(S8) (14000 NJ ppb), Maneb (6600 NJ ppb), Phytol (160 NJ ppb), Stigmast-4-en-3-one (460 NJ ppb), Napthalene, 1-methyl- (78 NJ ppb), Benzo[b]naphtho[2,1-d]thiph (310 NJ ppb), 7H-Benz[de]anthracen-7-one (240 NJ ppb) and Benzo[e]pyrene (950 NJ ppb). Pesticides include Endosulfan 1 (690 ppb), Dieldrin (5.2 P ppb), 4,4'-DDE (7.4 DJ ppb), Endrin (6.2 JPD ppb), Endosulfan sulfate (21 DJ ppb), Endrin aldehyde (80 PD ppb), 4,4'DDT (7.6 P ppb), Endrin Ketone (5.3 P ppb), alpha-Chlordane (6 ppb) and gamma-Chlordane (6.8 P ppb). Inorganic substances include Arsenic (8.9 ppm), Lead (141 ppm) and Cyanide (0.7 ppm).

#### 4.3 POTENTIAL UNDETECTED SOURCES

Illinois Environmental Protection Agency files do not document the illegal dumping or burying of hazardous materials at the Rockford Sand and Gravel site. However the potential exists that burying of hazardous materials or unreported spills may have occurred prior to or during the years the facility was in operation or by unauthorized dumping after hours.

## 5.0 MIGRATION PATHWAYS

### 5.1 INTRODUCTION

The CERCLA Integrated Site Assessment program identifies three migration pathways and one exposure pathway by which hazardous substances may pose a threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these four pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

This section presents and discusses information collected during the CERCLA Integrated Site Assessment inspection of Rockford Sand and Gravel. This information, together with information documented in other sources, will be utilized in analyzing the site's impact on the four pathways and the various human and environmental targets within the established target distance limits.

Discussions of the pathways will include pathway descriptions, contaminant sources, and targets, such as human populations, fisheries, endangered species, wetlands and other sensitive environments.

### 5.2 GROUNDWATER

Groundwater is widely used in the area. The city of Rockford (population 142,556) obtains all its drinking water from 38 active wells which pump from different locations throughout the city. The geology of the area around the

Rockford Sand and Gravel site consists of glacial drift composed of sand and gravels of medium to dense relative density which may be up to 280 feet thick overlying bedrock. The bedrock is composed of fractured dolomite of the Galena and Plattville Groups of the Ordovician System Champlainian Series which overly the St. Peter Sandstone. Groundwater is obtained locally from both the glacial and bedrock aquifers.

The nearest residences known to use groundwater for drinking are located in the subdivision located adjacent to the property on the north and the nearest municipal well is Rockford Well Number 34 which is a 1,485 feet deep well cased to 325 feet located approximately 500 feet west of the site. The number of people who use groundwater in a 4-mile radius of the site was estimated using information obtained from the City of Rockford Water Department, USGS topographic maps and the average persons per household in Winnebago County. The estimated population is:

<u>Distance (miles)</u>	<u>Population</u>
0 to 1/4	4,002
>1/4 to 1/2	151
>1/2 to 1	3,965
>1 to 2	11,711
>2 to 3	15,494
>3 to 4	31,173

There are six monitoring wells on the Rockford Sand and Gravel site that were installed in 1973. Groundwater

elevations obtained from the six monitoring wells during the 1994 quarterly analysis suggest that the general groundwater flow is towards the Rock River which is east of the property. Groundwater samples were collected from six monitoring and one residential well. The results from the six monitoring wells indicate an observed release to groundwater that is attributable to the site. The compounds found three times background or above detection limits are shown in the Key Sample Table 3-4 (Groundwater). Sampling location G201 represents the background well. There are two duplicate samples that were collected, G106/G107 and G201/G202. This was necessary since the monitoring well and residential (drinking water) samples were sent to different laboratories.

### 5.3 SURFACE WATER

The property terrain is irregular with no noticeable overland flow route to surface water. However, the close proximity to the Rock River suggests that groundwater from the property could enter this waterway via discharge from the sand and gravel aquifer.

The nearest wetlands consists of several islands located approximately 400 feet southeast of the property that are classified as Paulustrine Forested Broad-leaved deciduous seasonally flooded wetlands with approximately .65 miles of frontage along the river. Rockford Sand and Gravel Pit Number 2 is classified as a Lucustrine Limnetic Unconsolidated bottom permanently flooded excavated wetland.

There are approximately 13.6 miles of wetland frontage along the fifteen mile surface water pathway in the Rock River downstream from the Rockford Sand and Gravel property. The Rock River is widely used for recreation and fishing and according to the Illinois Department of Conservation is classified as a "highly valued aquatic resource" since it provides a good fishery for important gamefish species. The Illinois Water Resources Data Book, 1989, indicates that the average flow in the Rockford area is approximately 4100 cubic feet per second.

No surface water samples were collected during the November 2 and 3, 1994 Integrated Assessment site inspection of the Rockford Sand and Gravel site.

#### 5.4 AIR PATHWAY

The Rockford Sand and Gravel facility property is currently vacant and security consists of a locked gate to limit access. The site does not have a custodian during the day and contains fencing on the west and north sides of the property. Access from the south is hindered by Route 20 and the Rockford Sand and Gravel site Number 2. A strip of land approximately 400 feet wide with irregular terrain and brush and the Rock River beyond hinder access from the east.

The property is located in the southwestern edge of Rockford and has private residences and commercial businesses to the west and private residences on the north sides. No schools or daycare facilities are located within 200 feet of

any contaminated areas. There are approximately 45,489 people who live within a four mile radius of the site. The estimated population potential for release in a 4-mile radius of the site is:

<u>Distance (miles)</u>	<u>Population</u>
Onsite	35
0 to 1/4	251
>1/4 to 1/2	1,862
>1/2 to 1	3,635
>1 to 2	7,300
>2 to 3	10,752
>3 to 4	21,689

No documented releases to the air were observed in the breathing zone during the CERCLA Integrated Site Assessment inspection while samples were being collected. HNU photo-ionization detector readings with a 11.7 eV lamp were taken during sample collection but no readings above background were observed. The potential for the wind to carry contaminants off-site is possible since contaminants were found in the top six inches of soil onsite.

#### 5.5 SOIL EXPOSURE PATHWAY

The dump area is accessible from the west and north sides to trespassers who can gain access along Simpson Road or from holes in the fence along the north side. People are reported to trespass and fish in the sand and gravel pit

(Number 2) located adjacent to the south side of the property.

The nearest individual (residence) is located adjacent to the north side of the property and the nearest school, Riverside, is located approximately 3,600 feet south. A review of USGS topographic maps, city maps and U.S. Census data indicate that approximately 5,748 people live within a one-mile radius of the site. The estimated population within one mile of the site is:

<u>Distance (miles)</u>	<u>Population</u>
Onsite	35
0 to 1/4	251
>1/4 to 1/2	1,862
>1/2 to 1	3,635

According to the Illinois Department of Conservation there are no terrestrial sensitive environments near the Rockford Sand and Gravel site. Wetland Inventory Maps indicate there are approximately 56.7 acres of wetlands within a half mile radius of the site.

Soil samples taken during the Integrated Site Assessment inspection document areas of observed contamination by contaminants that are attributable to the site.

## 6.0 BIBLIOGRAPHY

Illinois Department of Public Health well construction reports/Geological Water Survey well records for the Rockford, Illinois area.

Illinois Environmental Protection Agency, Division of Public Water Supplies. Well Inventory Sheets for City of Rockford.

Well logs for municipal wells obtained from the City of Rockford Water Division.

Illinois Department of Conservation. Review of Sensitive Environment Locations letter of March 8, 1994 for Rockford Sand and Gravel.

United States Department of the Interior, National Wetlands Inventory Maps for Rockford South, Kishwaukee, Stillman Valley and Oregon, IL. Quadrangles, 7.5 Minute Series.

Flood Insurance Rate Map, November 19, 1980 for the City of Rockford, IL. Federal Emergency Management Agency.

USGS, 1976, Winnebago, IL. Quadrangle, 7.5 Minute Series.

USGS, 1993, Rockford North, IL. Quadrangle, 7.5 Minute Series.

USGS, 1971, Kishwaukee, IL. Quadrangle, 7.5 Minute Series.

USGS, 1993, Rockford South, IL. Quadrangle, 7.5 Minute Series.

IEPA Site Reconnaissance Visit of September 21, 1994 to Rockford Sand and Gravel, Rockford, Il.

APPENDIX A

SITE 4-MILE RADIUS MAP

ROCKFORD SAND AND GRAVEL

# SDMS US EPA Region V

## *Imagery Insert Form*

**Some images in this document may be illegible or unavailable in SDMS.  
Please see reason(s) indicated below:**

☐

Illegible due to bad source documents. Image(s) in SDMS is equivalent to hard copy.

**Specify Type of Document(s) / Comment**

☐

**Confidential Business Information (CBI).**

This document contains highly sensitive information. Due to confidentiality, materials with such information are not available in SDMS. You may contact the EPA Superfund Records Manager if you wish to view this document.

**Specify Type of Document(s) / Comment**

☒

**Unscannable Material: Oversized   X   or      Format.**

Due to certain scanning equipment capability limitations, the document page(s) is not available in SDMS. The original document is available for viewing at the Superfund Records center.

**Specify Type of Document(s) / Comment**

☐

**Other:**

APPENDIX B

SURFACE WATER ROUTE MAP

ROCKFORD SAND AND GRAVEL

# SDMS US EPA Region V

## *Imagery Insert Form*

**Some images in this document may be illegible or unavailable in SDMS.  
Please see reason(s) indicated below:**

☐

Illegible due to bad source documents. Image(s) in SDMS is equivalent to hard copy.

**Specify Type of Document(s) / Comment**

☐

**Confidential Business Information (CBI).**

This document contains highly sensitive information. Due to confidentiality, materials with such information are not available in SDMS. You may contact the EPA Superfund Records Manager if you wish to view this document.

**Specify Type of Document(s) / Comment**

☒

**Unscannable Material: Oversized X or    Format.**

Due to certain scanning equipment capability limitations, the document page(s) is not available in SDMS. The original document is available for viewing at the Superfund Records center.

**Specify Type of Document(s) / Comment**

☐

**Other:**

APPENDIX C

U.S. EPA FORM 2070-13

ROCKFORD SAND AND GRAVEL





# Site Inspection Report



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION	
01 STATE IL	02 SITE NUMBER ILO 00303437

II. SITE NAME AND LOCATION

01 SITE NAME (Legal description or descriptive name of site) ROCKFORD SAND & GRAVEL, (NO. 1)		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 4102 SOUTH MAIN			
03 CITY ROCKFORD	04 STATE IL	05 ZIP CODE 61102	06 COUNTY WINNEBAGO	07 COUNTY CODE 201	08 CONG. DIST. 16
09 COORDINATES LATITUDE 42 13 31.6 LONGITUDE 89 06 12.1		10 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN			

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 11, 2, 94 MONTH DAY YEAR	02 SITE STATUS <input type="checkbox"/> ACTIVE <input checked="" type="checkbox"/> INACTIVE	03 YEARS OF OPERATION 1950 1989 BEGINNING YEAR ENDING YEAR		UNKNOWN	
04 AGENCY PERFORMING INSPECTION (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. MUNICIPAL <input type="checkbox"/> D. MUNICIPAL CONTRACTOR <input checked="" type="checkbox"/> E. STATE <input type="checkbox"/> F. STATE CONTRACTOR <input type="checkbox"/> G. OTHER					

05 CHIEF INSPECTOR ROBERT CASPER	06 TITLE EPS	07 ORGANIZATION ILL. EPA	08 TELEPHONE NO. (217) 524-1661
09 OTHER INSPECTORS PETE SORENSEN	10 TITLE EPS	11 ORGANIZATION "	12 TELEPHONE NO. (217) 524-1657
KIM HUBBERT	EPS	"	(217) 524-1654
MARK WAGNER	EPS	"	(217) 524-5224
			( )
			( )
13 SITE REPRESENTATIVES INTERVIEWED TOM HILBERT	14 TITLE ENVIRONMENTAL ENGINEER	15 ADDRESS WINNEBAGO REGULATION SERVICE, ROCKFORD IL	16 TELEPHONE NO. (815) 874-4806
			( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION 8:50 AM	19 WEATHER CONDITIONS PARTLY CLOUDY, WINDY, 48°F
--	----------------------------------	---

IV. INFORMATION AVAILABLE FROM

01 CONTACT ROBERT CASPER	02 OF (Agency or Organization) ILL EPA	03 TELEPHONE NO. (217) 524-166		
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM ROBERT CASPER	05 AGENCY ILL EPA	06 ORGANIZATION RIMS	07 TELEPHONE NO. 217-524-1661	08 DATE 8, 21, 95 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER IL 0030377

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply) <input checked="" type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER, FINES <input type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER _____ (Specify)	02 WASTE QUANTITY AT SITE (Measure of waste quantity) TONS _____ CUBIC YARDS <u>UNKNOWN</u> NO. OF DRUMS _____	03 WASTE CHARACTERISTICS (Check all that apply) <input checked="" type="checkbox"/> A TOXIC <input type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input checked="" type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE
--	--	--

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	ONLY WASTE			
SOL	SOLVENTS	<u>UNKNOWN</u>		
PSO	PESTICIDES	<u>UNKNOWN</u>		
OCC	OTHER ORGANIC CHEMICALS	<u>UNKNOWN</u>		<u>SEMI-VOLATILE AT</u>
IOC	INORGANIC CHEMICALS	<u>UNKNOWN</u>		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	ACETONE		SOIL	39.0 B	PPB
OCC	PHENANTHRENE		"	1300	PPB
"	FLUORANTHENE		"	2500	PPB
"	PIRENE		"	2400	"
"	BENZG (a) ANTHRACENE		"	1500	"
"	CHRYSENE		"	1200	"
"	BENZO (b) FLUORANTHENE		"	1800	"
"	BENZO (h) FLUORANTHENE		"	1500	"
"	BENZO (a) PYRENE		"	900	"
"	INDENO (1,2,3-cd) PYRENE		"	1000	"
"	BENZO (g,h,i) PERLENE		"	980 B	"
OCC	MANEB		"	6600 NJ	"
PSD	ENDOSULFAN SULFATE		"	21 DJ	PPB
PSD	ENDRIN ALDEHYDE		SOIL	80 PD	PPB
IOC	CADMIUM		SEDIMENT	7.90	PPM
IOC	LEAD		SOIL	141	PPM

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references to data used for site characterization reports)

SITE REPRESENTATIVE INTERVIEWS  
INTEGRATED SITE ASSESSMENT INSPECTION OF 11-2-94  
AND ANALYTICAL RESULTS-



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

1 IDENTIFICATION  
01 STATE IL 02 SITE NUMBER ILO 00303437

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED 66496 04 NARRATIVE DESCRIPTION  
CONTAMINATION WAS DETECTED IN MONITORING WELLS ON SITE  
BUT NOT IN NEARBY RESIDENTIAL WELL. ALL DRINKING WATER IN THE AREA  
IS OBTAINED FROM GROUNDWATER.

01 ☐ B SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
SURFACE WATER NOT SAMPLED. NOT USED FOR DRINKING.

01 ☐ C CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED 45489 04 NARRATIVE DESCRIPTION  
NO RELEASE TO AIR DOCUMENTED

01 ☐ D FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
NONE

01 ☒ E DIRECT CONTACT 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED 5748 04 NARRATIVE DESCRIPTION  
ON SITE SOIL SAMPLES CONTAINED ELEVATED LEVELS OF VOLATILES,  
SEMI-VOLATILES, PESTICIDES, TENTATIVELY IDENTIFIED COMPOUNDS  
AND INORGANIC SUBSTANCES.

01 ☐ F CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 AREA POTENTIALLY AFFECTED 40 04 NARRATIVE DESCRIPTION  
ON SITE SOIL SAMPLES CONTAINED CONTAMINATION.

01 ☒ G DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☒ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED 66496 04 NARRATIVE DESCRIPTION  
POTENTIAL TO CONTAMINATE DRINKING WATER WELLS.

01 ☐ H WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 WORKERS POTENTIALLY AFFECTED \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
NONE - SITE CLOSED

01 ☐ I POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED  
03 POPULATION POTENTIALLY AFFECTED \_\_\_\_\_ 04 NARRATIVE DESCRIPTION  
NONE



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL DLO 00303437

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NONE

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include number(s) of incident)

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NONE

01 ☐ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NONE - NO SAMPLES TAKEN

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES  
(Spills, Runoff, Standing Liquids, Leaking Drums)

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED \_\_\_\_\_

04 NARRATIVE DESCRIPTION

NONE

01 ☐ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NONE

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NONE

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

NONE

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

NONE

III. TOTAL POPULATION POTENTIALLY AFFECTED: 45489

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references to EPA, State, local, or other sources.)

INTEGRATED ASSESSMENT INSPECTION OF 11/2/94 & ANALYTICAL RESULTS  
DEPA FILES



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION  
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION  
01 STATE IL 02 SITE NUMBER IL 00303437

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A NPDES				
<input type="checkbox"/> B UIC				
<input type="checkbox"/> C AIR				
<input type="checkbox"/> D RCRA				
<input type="checkbox"/> E RCRA INTERIM STATUS				
<input type="checkbox"/> F SPCC PLAN				
<input type="checkbox"/> G STATE (Specify)				
<input type="checkbox"/> H LOCAL (Specify)				
<input type="checkbox"/> I OTHER (Specify)				
<input checked="" type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 STORAGE/ DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE 1
<input type="checkbox"/> B PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input type="checkbox"/> C DRUMS, ABOVE GROUND			<input type="checkbox"/> C. CHEMICAL/PHYSICAL	06 AREA OF SITE 45.3 (Acres)
<input type="checkbox"/> D TANK, ABOVE GROUND			<input type="checkbox"/> D. BIOLOGICAL	
<input type="checkbox"/> E TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input checked="" type="checkbox"/> F LANDFILL	DEMO DEBRIS		<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H OPEN DUMP			<input type="checkbox"/> H. OTHER (Specify)	
<input type="checkbox"/> I OTHER (Specify)				

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)  
☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DRUMS, LINERS, BARRIERS, ETC.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☒ YES ☐ NO  
02 COMMENTS

VI. SOURCES OF INFORMATION (List specific references to site maps, sample analysis reports)

EPA FILES



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 8 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

1 IDENTIFICATION  
01 STATE IL 02 SITE NUMBER IL 00303437

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check all that apply)	02 STATUS	03 DISTANCE TO SITE																	
<table><tr><td>SURFACE</td><td>WELL</td></tr><tr><td>COMMUNITY A. <input type="checkbox"/></td><td>B. <input checked="" type="checkbox"/></td></tr><tr><td>NON-COMMUNITY C. <input type="checkbox"/></td><td>D. <input checked="" type="checkbox"/></td></tr></table>	SURFACE	WELL	COMMUNITY A. <input type="checkbox"/>	B. <input checked="" type="checkbox"/>	NON-COMMUNITY C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	<table><tr><td>ENDANGERED</td><td>AFFECTED</td><td>MONITORED</td></tr><tr><td>A. <input type="checkbox"/></td><td>B. <input type="checkbox"/></td><td>C. <input type="checkbox"/></td></tr><tr><td>D. <input checked="" type="checkbox"/></td><td>E. <input type="checkbox"/></td><td>F. <input type="checkbox"/></td></tr></table>	ENDANGERED	AFFECTED	MONITORED	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>	<table><tr><td>A. 0.1 (mi)</td></tr><tr><td>B. 0.05 (mi)</td></tr></table>	A. 0.1 (mi)	B. 0.05 (mi)
SURFACE	WELL																		
COMMUNITY A. <input type="checkbox"/>	B. <input checked="" type="checkbox"/>																		
NON-COMMUNITY C. <input type="checkbox"/>	D. <input checked="" type="checkbox"/>																		
ENDANGERED	AFFECTED	MONITORED																	
A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>																	
D. <input checked="" type="checkbox"/>	E. <input type="checkbox"/>	F. <input type="checkbox"/>																	
A. 0.1 (mi)																			
B. 0.05 (mi)																			

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check all that apply)			
<input checked="" type="checkbox"/> A. ONLY SOURCE FOR DRINKING (Other sources available) COMMERCIAL INDUSTRIAL IRRIGATION (No other water sources available)			
<input type="checkbox"/> B. DRINKING (Other sources available) COMMERCIAL INDUSTRIAL IRRIGATION (No other water sources available)			
<input type="checkbox"/> C. COMMERCIAL INDUSTRIAL IRRIGATION (Other sources available)			
<input type="checkbox"/> D. NOT USED, UNUSEABLE			
02 POPULATION SERVED BY GROUND WATER 66496		03 DISTANCE TO NEAREST DRINKING WATER WELL 0.05 (mi)	
04 DEPTH TO GROUNDWATER 20 (ft)	05 DIRECTION OF GROUNDWATER FLOW EAST	06 DEPTH TO AQUIFER OF CONCERN 20 (ft)	07 POTENTIAL YIELD OF AQUIFER (gpd)
		08 SOLE SOURCE AQUIFER <input type="checkbox"/> YES <input type="checkbox"/> NO	

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

LOCAL WELLS USE SHALLOW SAND & GRAVEL AQUIFER. MUNICIPAL WELLS USE SAND & GRAVEL AS WELL AS DEEP BEDROCK AQUIFER.

10 RECHARGE AREA <input type="checkbox"/> YES <input type="checkbox"/> NO	COMMENTS	11 DISCHARGE AREA <input type="checkbox"/> YES <input type="checkbox"/> NO	COMMENTS
--	----------	---	----------

IV. SURFACE WATER

01 SURFACE WATER USE (Check all that apply)			
<input checked="" type="checkbox"/> A. RESERVOIR RECREATION DRINKING WATER SOURCE			
<input type="checkbox"/> B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES			
<input type="checkbox"/> C. COMMERCIAL, INDUSTRIAL			
<input type="checkbox"/> D. NOT CURRENTLY USED			
02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER			
NAME		AFFECTED	DISTANCE TO SITE
ROCK RIVER		<input type="checkbox"/>	0 (mi)
		<input type="checkbox"/>	(mi)
		<input type="checkbox"/>	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN			02 DISTANCE TO NEAREST POPULATION
ONE (1) MILE OF SITE A. 5783 NO. OF PERSONS	TWO (2) MILES OF SITE B. 13083 NO. OF PERSONS	THREE (3) MILES OF SITE C. 23935 NO. OF PERSONS	0.05 (mi)
03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE			04 DISTANCE TO NEAREST OFF-SITE BUILDING 0.05 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, secondary population, urban area)

SITE IS LOCATED AT SOUTH END OF ROCKFORD. PRIVATE RESIDENCES ARE LOCATED NORTH AND WEST OF THE PROPERTY. SITE IS LOCATED IN MIXED COMMERCIAL & RESIDENTIAL AREA.



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

1. IDENTIFICATION

01 STATE IL 02 SITE NUMBER IL00030343

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A.  $10^{-8} - 10^{-6}$  cm/sec ☐ B.  $10^{-4} - 10^{-6}$  cm/sec ☒ C.  $10^{-4} - 10^{-3}$  cm/sec ☐ D. GREATER THAN  $10^{-3}$  cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE  
(Less than  $10^{-8}$  cm/sec)  
☐ B. RELATIVELY IMPERMEABLE  
( $10^{-4} - 10^{-6}$  cm/sec)  
☒ C. RELATIVELY PERMEABLE  
( $10^{-3} - 10^{-4}$  cm/sec)  
☐ D. VERY PERMEABLE  
(Greater than  $10^{-3}$  cm/sec)

03 DEPTH TO BEDROCK

30 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

UNKNOWN (ft)

05 SOIL BN

UNKNOWN

06 NET PRECIPITATION

3.0 (in)

07 ONE YEAR 24 HOUR RAINFALL

2.8 (in)

08 SLOPE  
SITE SLOPE

DIRECTION OF SITE SLOPE

TERRAIN AVERAGE SLOPE

0 %

—

0 %

09 FLOOD POTENTIAL

SITE IS IN 100 YEAR FLOODPLAIN

10

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (3 DEC 78 minimum)

ESTUARINE

OTHER

A — (mi)

B 0.08 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

— (mi)

ENDANGERED SPECIES: —

13 LAND USE IN VICINITY

DISTANCE TO

COMMERCIAL/INDUSTRIAL

RESIDENTIAL AREAS, NATIONAL/STATE PARKS,  
FORESTS, OR WILDLIFE RESERVES

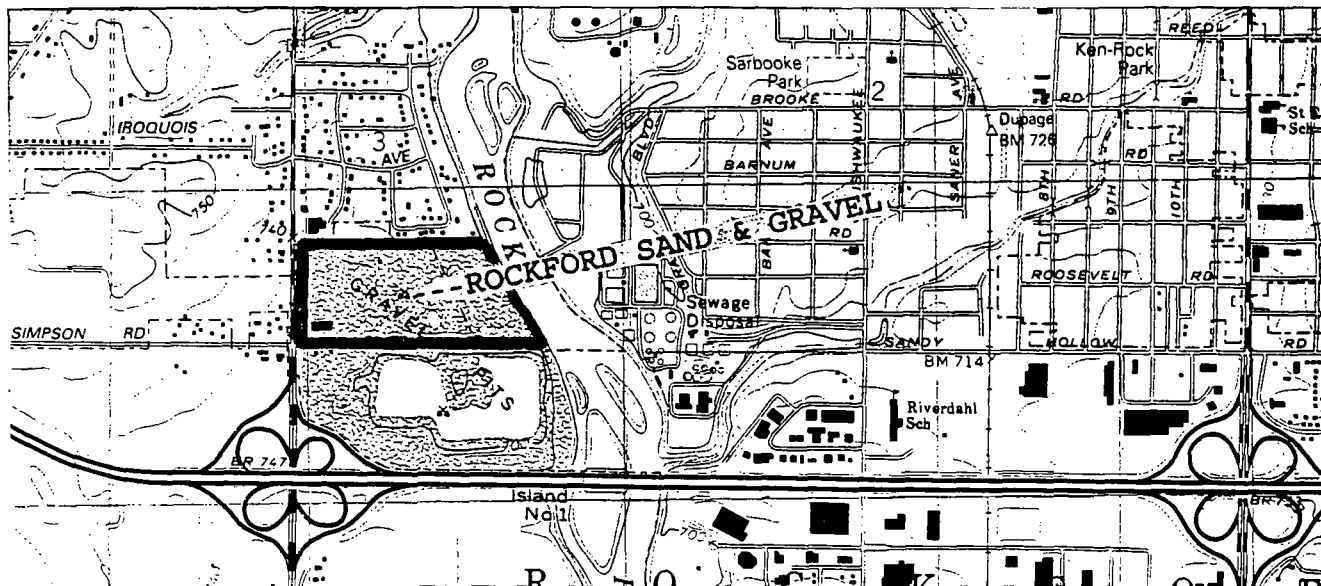
AGRICULTURAL LANDS  
PRIME AG LAND AG LAND

A 0.05 (mi)

B 0.05 (mi)

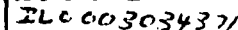
C 0.3 (mi) D — (mi)

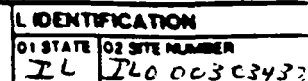
14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



VII. SOURCES OF INFORMATION (See specific reference to 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100)

IEPA FILES  
FEMA FLOOD MAPS





<b>I. CURRENT OWNER(S)</b>					<b>PARENT COMPANY (If applicable)</b>				
01 NAME <b>WINNERAGO RECLAMATION SERVICE, INC</b>			02 D+B NUMBER		06 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.) <b>8403 LINDENWOOD ROAD</b>			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD, etc.)			11 SIC CODE	
05 CITY <b>ROCKFORD</b>		06 STATE <b>IL</b>	07 ZIP CODE <b>61109</b>		12 CITY			13 STATE	
01 NAME			02 D+B NUMBER		06 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY			13 STATE	
01 NAME			02 D+B NUMBER		06 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY			13 STATE	
01 NAME			02 D+B NUMBER		06 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY			13 STATE	
01 NAME			02 D+B NUMBER		06 NAME			09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD, etc.)			11 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		12 CITY			13 STATE	
<b>III. PREVIOUS OWNER(S) (List must include name)</b>					<b>IV. REALTY OWNER(S) (If applicable, list name, address, phone)</b>				
01 NAME			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		05 CITY		06 STATE		
01 NAME			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		05 CITY		06 STATE		
01 NAME			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		05 CITY		06 STATE		
01 NAME			02 D+B NUMBER		01 NAME			02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD, etc.)			04 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE		05 CITY		06 STATE		
<b>V. SOURCES OF INFORMATION (Can indicate reference to a state file, company employee, reports)</b>									

## SITE REPRESENTATIVE INTERVIEWS



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL ILc 003034371

II. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (if applicable)			
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, A/D, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, A/D, etc.)		13 SIC CODE	
06 CITY		08 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER					
III. PREVIOUS OPERATOR(S) (List most recent first, provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)			
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
ANDERSON SAND AND GRAVEL							
03 STREET ADDRESS (P.O. Box, A/D, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, A/D, etc.)		13 SIC CODE	
4102 S. MAIN							
06 CITY		08 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
ROCKFORD		IL	61102				
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
20		ROBERT ANDERSON					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
ROCKFORD BLACKTOP CO.							
03 STREET ADDRESS (P.O. Box, A/D, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, A/D, etc.)		13 SIC CODE	
4102 S. MAIN							
06 CITY		08 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
ROCKFORD		IL	61102				
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
16							
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, A/D, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, A/D, etc.)		13 SIC CODE	
06 CITY		08 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					

IV. SOURCES OF INFORMATION (List specific references, e.g., owner files, former operator, residents)

SITE REPRESENTATIVE INTERVIEWS  
IEPA FILES



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	IL000503732

II. ON-SITE GENERATOR

01 NAME NONE	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME NONE	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references to EPA, other files, reports, interviews, etc.)

EPA FILES  
EPA



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER 003034371

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION <u>NO</u>	02 DATE _____	03 AGENCY _____



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

L IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL IL0 003034371

II PAST RESPONSE ACTIVITIES (continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ S. CAPPING/COVERING  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ T. BULK TANKAGE REPAIRED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ U. GROUT CURTAIN CONSTRUCTED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ V. BOTTOM SEALED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ W. GAS CONTROL  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ X. FIRE CONTROL  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ Y. LEACHATE TREATMENT  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ Z. AREA EVACUATED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ 1. ACCESS TO SITE RESTRICTED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ 2. POPULATION RELOCATED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

01 ☐ 3. OTHER REMEDIAL ACTIVITIES  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

NO

III SOURCES OF INFORMATION (List specific references as to where this information was obtained)

EPA FILES



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL ILD 063084371

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

NONE

III. SOURCES OF INFORMATION (Cite specific references to state files, national system, records)

EPA FILES

# APPENDIX D

## TARGET COMPOUND LIST

ROCKFORD SAND AND GRAVEL

## **TARGET COMPOUND LIST**

### **Volatile Target Compounds**

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

### **Base/Neutral Target Compounds**

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene

2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

#### Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

### Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

### Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobalt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

## DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICS) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and <u>all</u> concentration values are flagged with the "D" flag.	Not used.
E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference.
A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
M	Not used.	Duplicate injection (a QC parameter not met).

N	Not used	Spiked sample (a QC parameter not met).
S	Not used.	The reported value was determined by the Method of Standard Additions (MSA).
W	Not used.	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
*	Not used.	Duplicate analysis (a QC parameter not within control limits).
+	Not used.	Correlation coefficient for MSA (a QC parameter) is less than 0.995.
P	Not used.	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
CV	Not used.	Method qualifier indicates analysis by Cold Vapor AA.
AV	Not used.	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not used.	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
T	Not used.	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

# APPENDIX E

## IEPA SITE PHOTOGRAPHS

ROCKFORD SAND AND GRAVEL

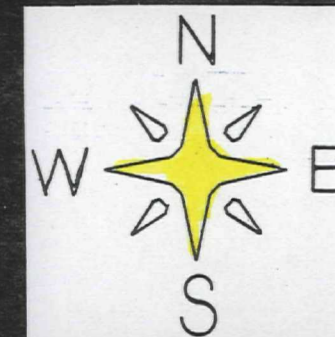
ROCKFORD SAND & GRAVEL

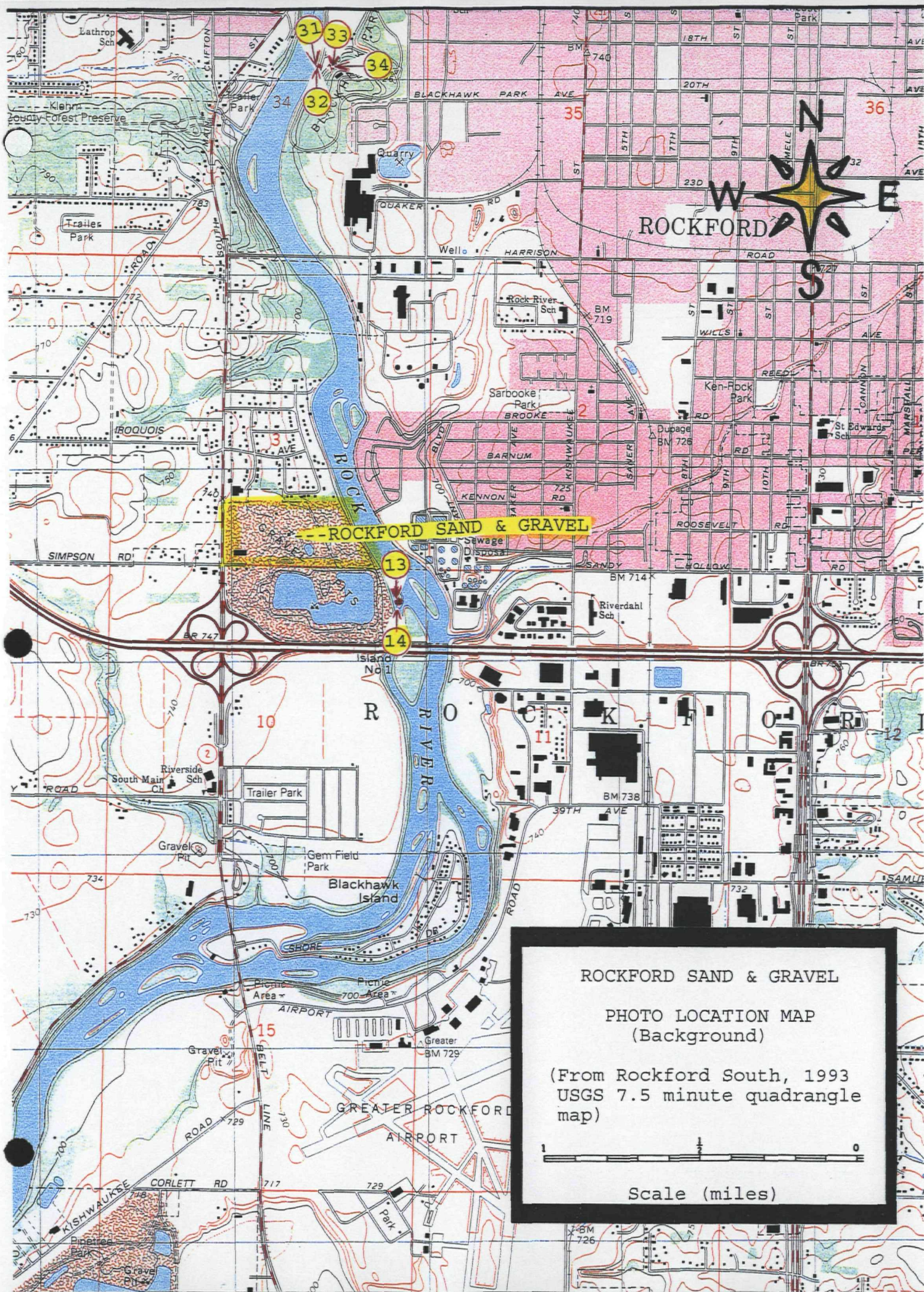
PHOTO LOCATION MAP

Scale: 1 inch equals 200 feet.

From: Illinois Department of Transportation  
aerial photo taken on April 16, 1988.

ROCK RIVER





DATE: November 2, 1994

TIME: 9:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 1

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample location G103.  
This well is located  
approximately 125 feet  
east of South Main Street  
(Route 2) which is to the  
right in the photo and  
approximately 240 feet  
north of the Laidlaw  
facility.



DATE: November 2, 1994

TIME: 9:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 2

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the east.

Sample location G103.  
The well depth is 64.9  
feet deep. The berm at  
top left extends along  
the entire western edge  
of the property.



DATE: November 2, 1994

TIME: 11:15

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 3

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample location G104 is  
located approximately  
900 feet east of South  
Main Street and is near  
the northern border of  
the property fence line.  
Private residences lie  
beyond the fence.



DATE: November 2, 1994

TIME: 11:15

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 4

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the east.

Sample location G104. The  
private residences in the  
photo use groundwater for  
drinking. The monitoring  
well is 35.4 feet deep.



DATE: November 2, 1994

TIME: 12:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 5

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the east.

Sample location G101 is located approximately 400 feet west of the Rock River and along the north-east area of the property. Private residences lie approximately 150 feet to the north.



DATE: November 2, 1994

TIME: 12:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 6

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample location G101. The well is 49.9 feet deep. Private residences lie in the background.



DATE: November 2, 1994

TIME: 14:10

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 7

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the east.

Sample location G106 and  
duplicate G107. The well  
is 25.3 feet deep and  
located approximately 175  
feet west of the Rock  
River and 600 feet north  
of Simpson Road along the  
eastern area of the  
property.



DATE: November 2, 1994

TIME: 14:10

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 8

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample location G106 and  
duplicate G107. The Rock  
River is located approx-  
imately 175 feet to the  
left in the photo.



DATE: November 2, 1994

TIME: 15:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 9

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample point G105. This  
monitoring well is 26.9  
feet deep and located  
along the eastern edge of  
the property approximately  
300 feet west of the Rock  
River and 600 feet north  
of Simpson Road.



DATE: November 2, 1994

TIME: 15:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 10

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the west.

Sample location G105.



DATE: November 2, 1994

TIME: 17:00

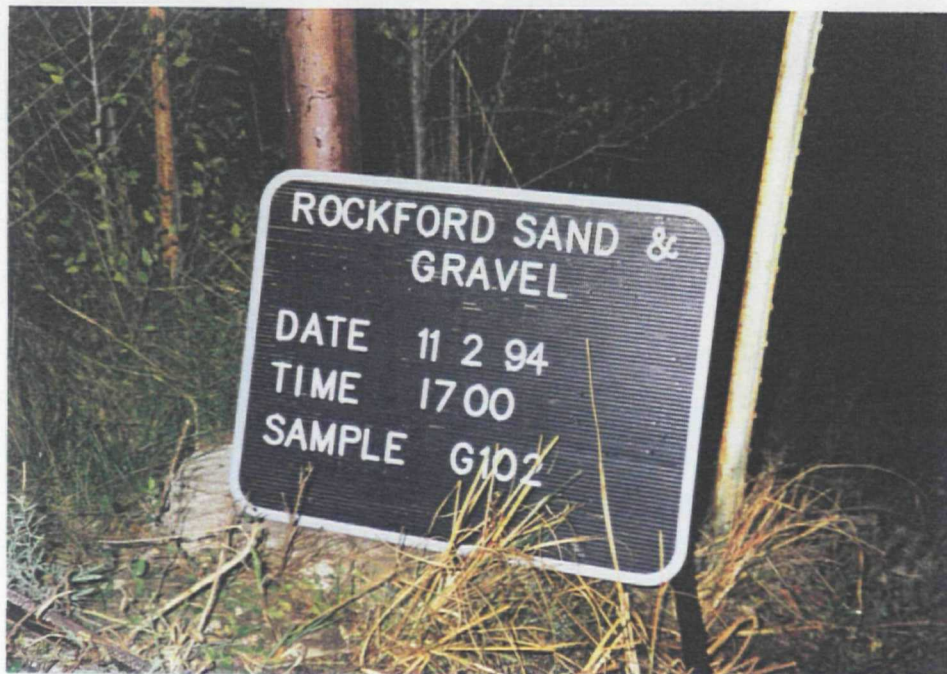
PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 11

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the east.

Sample location G102.  
This well is 35.8 feet  
deep and located on  
Simpson Road at the east  
end of the property,  
approximately 400 feet  
west of the Rock River.



DATE: November 2, 1994

TIME: 17:00

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 12

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample location G102.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



DATE: November 3, 1994

TIME: 7:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 13

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X204 was collected  
on an island located in  
the Rock River near the  
southeast corner of the  
property. The sediment  
was collected from a  
depth of 0 to 3 inches.



DATE: November 3, 1994

TIME: 7:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 14

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample X204. The Rock  
River water level was low  
enough to access the  
island on foot.



DATE: November 3, 1994

TIME: 8:40

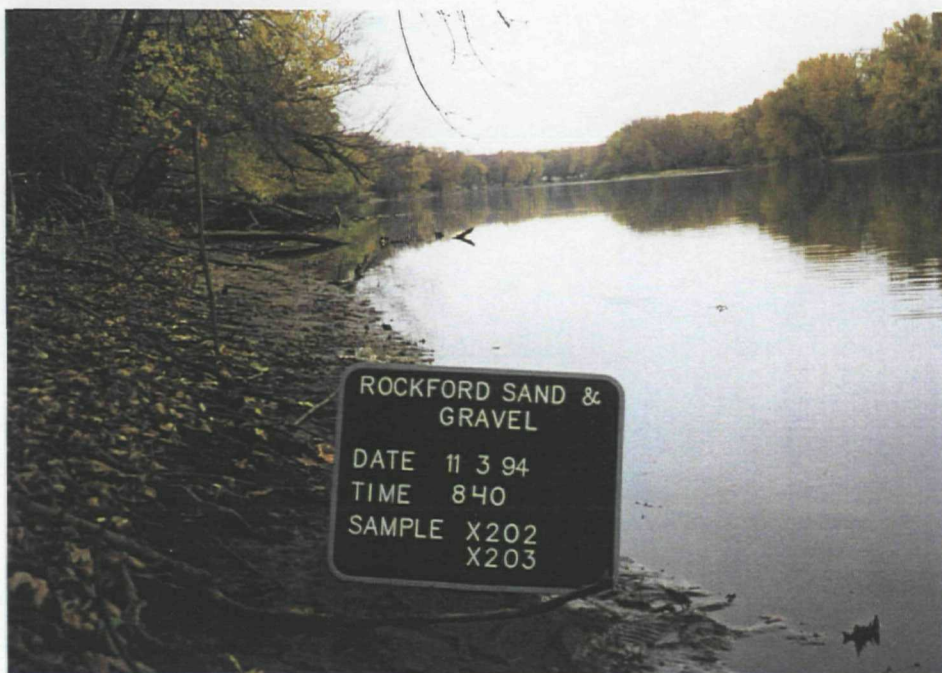
PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 15

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample X202 and duplicate  
X203 were collected along  
the Rock River  
approximately 210 feet  
north of Simpson road at  
a depth of 0 to 4 inches.



DATE: November 3, 1994

TIME: 8:40

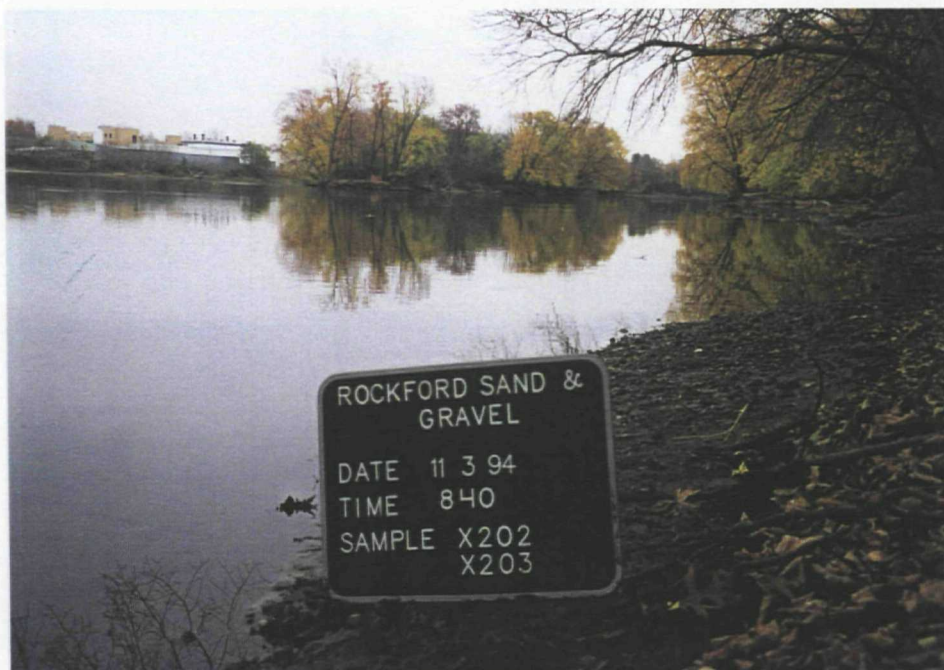
PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 16

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X202/X203. The  
Rockford Sand and Gravel  
property is to the right  
in the photo.



DATE: November 3, 1994

TIME: 9:10

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 17

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample X108 was collected  
at the southeastern end  
of the property 173 feet  
south of monitoring well  
G105.



DATE: November 3, 1994

TIME: 9:10

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 18

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the southwest-west

Sample X108 collected at  
a depth of 8 to 12 inches.



DATE: November 3, 1994

TIME: 10:10

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 19

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample X107 collected at  
the eastern portion of  
the property approximately  
87 feet south of monitor  
well G106/G107.



DATE: November 3, 1994

TIME: 10:10

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 20

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X107 was collected  
from a depth of 8 to 12  
inches.



DATE: November 3, 1994

TIME: 10:30

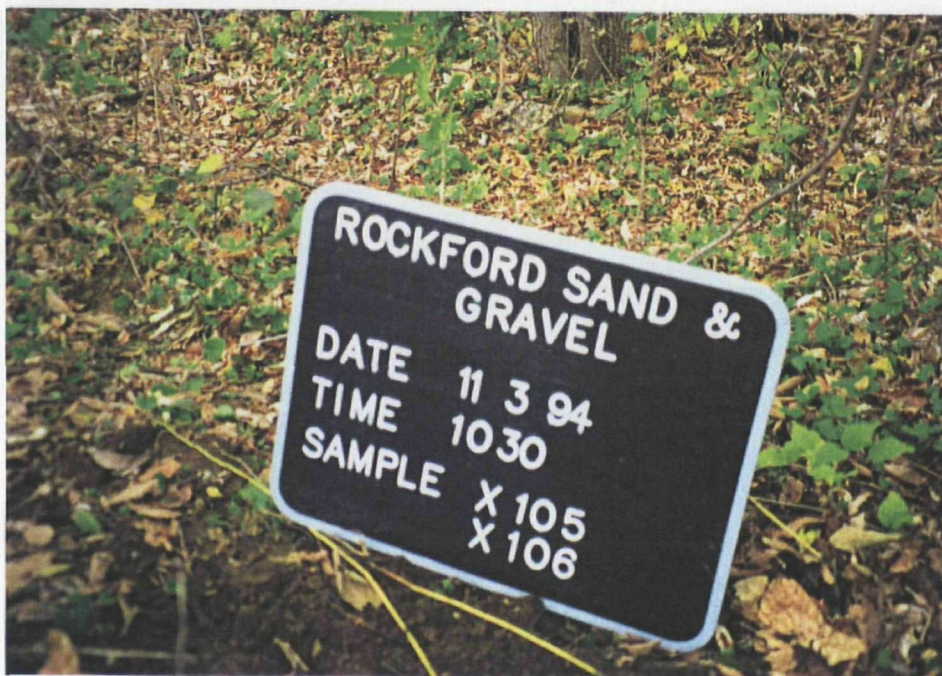
PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 21

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample X105 and duplicate  
X106 were obtained from  
the northeastern portion  
of the property.



DATE: November 3, 1994

TIME: 10:30

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 22

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the west.

Sample X105/X106 was  
obtained at a depth of 2  
to 6 inches.



DATE: November 3, 1994

TIME: 11:30

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 23

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the west.

Sample X104 was obtained  
in the south central .  
area of the property.  
Laidlaw waste disposal  
company is in the top  
background.



DATE: November 3, 1994

TIME: 11:30

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 24

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X104 was collected  
at a depth of 12 to 24  
inches.



DATE: November 3, 1994

TIME: 12:20

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 25

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the west.

Sample X103 was collected  
near the north end of the  
property approximately  
105 feet west and 94 feet  
south of monitoring well  
G104.



DATE: November 3, 1994

TIME: 12:20

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 26

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X103 was collected  
at a depth of 6 to 12  
inches.



DATE: November 3, 1994

TIME: 12:50

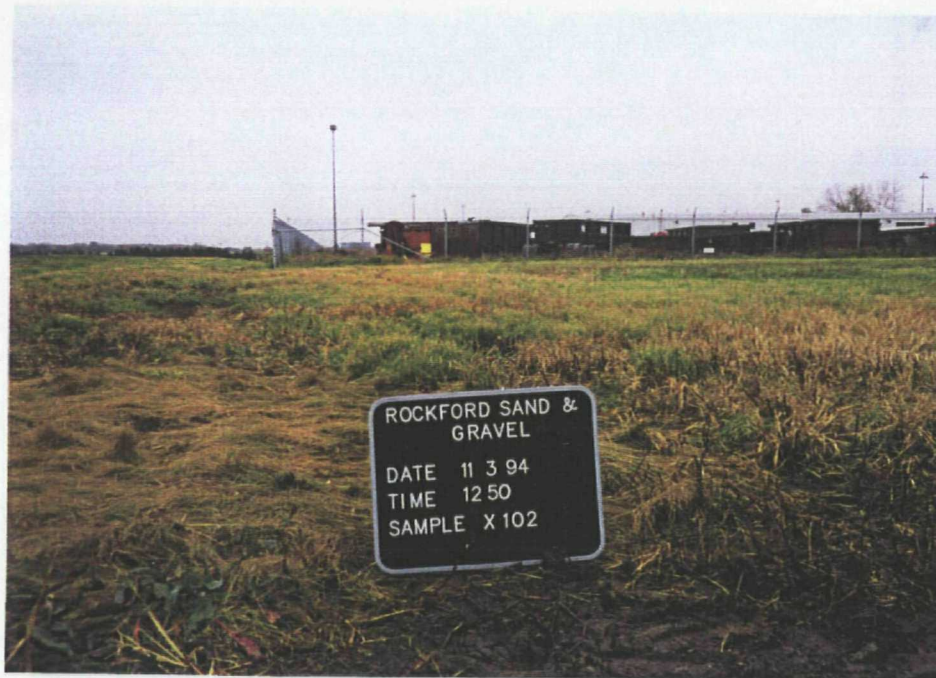
PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 27

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X102 was collected  
approximately 143 feet  
north of the Laidlaw  
facility.



DATE: November 3, 1994

TIME: 12:50

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 28

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the west.

Sample X102 was collected  
at a depth of 3 to 6  
inches. The houses in the  
background lie across So.  
Main Street (Route 2),  
which borders the  
property on the west.



DATE: November 3, 1994

TIME: 13:40

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 29

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample G201 and duplicate  
G202 collected at a  
private residence located  
approximately 500 feet  
north of the property.



DATE: November 3, 1994

TIME: 13:40

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 30

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the east.

Sample G201/G202 obtained  
from a 75 feet deep  
residential well.



DATE: November 3, 1994

TIME: 15:30

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 31

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Background sediment  
sample G201 collected  
1.4 miles upstream from  
the Rockford Sand and  
Gravel property in Black-  
hawk Park.



DATE: November 3, 1994

TIME: 15:30

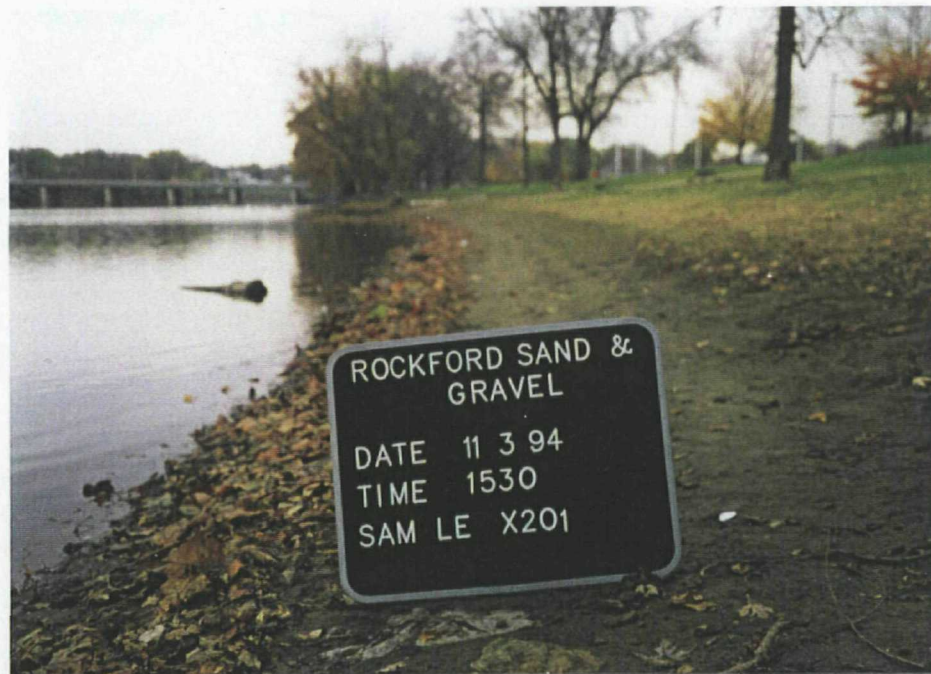
PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 32

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the north.

Sample X201 collected at  
a depth of 1 to 3 inches.



DATE: November 3, 1994

TIME: 15:45

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 33

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the south.

Sample X101 collected in  
Blackhawk Park at a depth  
of 2 to 4 inches.



DATE: November 3, 1994

TIME: 15:45

PHOTOGRAPH TAKEN BY:  
Robert Casper

PHOTO NUMBER: 34

LOCATION: L 2010300009  
Winnebago County  
Rockford Sand and Gravel  
IL: 0000034371

PICTURE TAKEN TOWARD  
the west.

Sample X101 collected in  
a lightly wooded area.

